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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,606	02/20/2004	Robert L. Heimann	EL021RH-2	1566

7590 06/16/2005

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EXAMINER
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LAVILLA, MICHAEL E

ART UNIT	PAPER NUMBER
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1775

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/783,606

Applicant(s)

HEIMANN ET AL.

Examiner

Michael La Villa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,7,8,10,12-16 and 18-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,7,8,10,12-16 and 18-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 20040830.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION*****Specification***

1. The incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).
2. At various locations in the Specification, applicant indicates a desire to "incorporate by reference" previously mentioned references. Some of these previously mentioned references are foreign patent documents and ordinary publications. To the extent that the referred to subject matter is "essential material," the request for "incorporation by reference" is improper and objected to.
3. The disclosure is objected to because of the following informalities: At various locations in the Specification, applicant refers to United States patent applications with varying degrees of description. Where possible, provision of serial numbers and/or issued patent numbers instead of

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attorney docket numbers is requested. In this manner, the reader will be able to locate the described subject matter.

4. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:
6. The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
7. Claims 1, 2, 4, 7, 8, 10, 12-16, 18, 20, and 21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. It is unclear where applicant derives antecedent support for an article whose surface is something other than an "electrically conductive surface." The field of the invention is described as pertaining to such surfaces, and applicant has not pointed to support in the Specification or otherwise for a more broadly claimed surface or otherwise provided justification for eliminating this limitation from the claims. Removal of this limitation therefore apparently constitutes introduction of new matter.
8. The following is a quotation of the second paragraph of 35 U.S.C. 112:
9. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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10. Claims 12-16, 19, and 21-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- I. Regarding Claim 12, line 2, it is unclear what is meant by the phrase "selected from the group consisting of from the group of." Is this intended to be standard Markush group language or something else?
- II. Regarding Claim 13, line 3, it is unclear what is meant by the phrase beginning "further comprising rinsing." Does this specify an additional product-by-process limitation? Must the step occur before or after the already listed steps of Claim 1? Is the step to occur between the "drying" and "applying a coating" steps? Regarding Claim 13, line 5, it is unclear what is meant by the phrase "further comprising applying at least one secondary coating." Does this specify an additional product-by-process limitation? It is unclear what is the sequential relationship between this additional step and those specified in Claim 1 and those in Claim 13.
- III. Regarding Claim 14, it is unclear what is the antecedent basis of the phrase "said rinsing comprising" as there is no rinsing step listed in Claim 1.

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- IV. Regarding Claim 16, it is unclear what is the antecedent basis of the phrase "said exposing" as there is no exposing step listed in Claim 1.
- V. Regarding Claim 19, line 3, it is unclear what is meant by the phrase "wherein said." Is this the article, the composition generally, or something else? In the last line of Claim 19, it is unclear what is meant by the phrase "exposure to white rust." Does this refer to the development of white rust during the course of the testing procedure or to something else?
- VI. Regarding Claim 21, it is unclear whether the claimed heating describes the medium temperature at the time of initial contact or possibly subsequent to initial contact. It is unclear what is the relationship between the claimed heating step of Claim 21 and the claimed contacting step already presented in Claim 1.

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

12. A person shall be entitled to a patent unless –

13. (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 1, 2, 5, 7, 8, 10, 12, 14-16, and 18-21 are rejected under 35

U.S.C. 102(b) as being anticipated by Petrole et al. USP 5,700,523.

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Petrole et al. teaches coating a zinc surface with a silicate solution and silane solution. See Petrole et al. (col. 7, lines 14-52; and Table 1). While Petrole does not teach using colloidal silica or other additives to the medium, the claimed surface is not described as necessarily containing colloidal silica or other additives, and so the claimed article is taught by Petrole notwithstanding the absence of these ingredients in the media of Petrole. Negligible amounts of colloidal silica in the medium would not be expected to result in obtained products that recognize the presence of such negligible amounts. Those panels that performed well in the ASTM B117 test would be expected to satisfy the claimed criteria

15. Claims 1, 2, 4, 5, 7, 8, 10, 12-16, 18, 20, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Kushida et al. USP 5,091,224.

Kushida et al. teaches coating a stainless steel surface with a sodium silicate solution and monomer solution of silicate ester compounds that would be expected to cure to form a silane or silicone type coating. See Kushida et al. (Abstract; col. 4, line 43 through col. 7, line 25). While Kushida does not teach using colloidal silica or other additives to the medium, the claimed surface is not described as necessarily containing colloidal silica or other additives, and so the claimed article is taught by Kushida notwithstanding the absence of these ingredients in the media of Kushida. Negligible amounts of colloidal silica in the medium would not be expected to result in obtained products that recognize the presence of such negligible amounts.

16. Claims 1, 2, 4, 5, 7, 8, 10, 12-16, and 18-22 are rejected under 35

U.S.C. 102(b) as being anticipated by Purnell et al. USP 5,451,431.

Purnell teaches coating galvanized steel substrate with a silicate layer and epoxy layer. The articles have excellent ASTM B117 performance which would be expected to meet the claimed limitation of Claim 19. See Purnell (col. 3, line 49 through col. 4, line 49; and Table IV). While Purnell does not teach using colloidal silica or other additives to the medium, the claimed surface is not described as necessarily containing colloidal silica or other additives, and so the claimed article is taught by Purnell notwithstanding the absence of these ingredients in the media of Purnell. Negligible amounts of colloidal silica in the medium would not be expected to result in obtained products that recognize the presence of such negligible amounts.

17. Claims 1, 2, 4, 5, 7, 8, 10, 12-16, 18, 20, and 21 are rejected under 35

U.S.C. 102(b) as being anticipated by Sabata et al. USP 5,478,655.

Sabata teaches coating a stainless steel surface with a sodium silicate solution, a monomer silane solution that cures to form a silicone layer, and an epoxy paint layer. See Sabata (Abstract; Table 1 and corresponding text; and col. 9, lines 41-67). While Sabata does not teach using colloidal silica or other additives to the medium, the claimed surface is not described as necessarily containing colloidal silica or other additives, and so the claimed article is taught by Sabata notwithstanding the absence of these ingredients in the media of Sabata. Negligible amounts of colloidal



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silica in the medium would not be expected to result in obtained products that recognize the presence of such negligible amounts.

**18.** Claims 1, 2, 4, 5, 7, 8, 10, 12-16, 18, 20, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by van Ooij et al. USP 5,108,793. van Ooij et al. teaches coating a galvanized steel surface with a sodium silicate solution, a monomer silane solution that cures to form a silane layer, and an epoxy paint layer. See van Ooij (Abstract; col. 2, line 36 through col. 4, line 11; col. 5, line 31 through col. 6, line 10; and Table 2 and corresponding text). While van Ooij does not teach using colloidal silica or other additives to the medium, the claimed surface is not described as necessarily containing colloidal silica or other additives, and so the claimed article is taught by van Ooij notwithstanding the absence of these ingredients in the media of van Ooij. Negligible amounts of colloidal silica in the medium would not be expected to result in obtained products that recognize the presence of such negligible amounts.

### **CONCLUSION**


- 19.** Claim 23 is not rejected over the reviewed prior art nor the prior art of record since a laminate having the claimed features, including the silica intermediate layer, is not taught or suggested. However, Claim 23 has been rejected under section 112, second paragraph since its claim scope is indefinite.
- 20.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael La Villa whose telephone

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number is (571) 272-1539. The examiner can normally be reached on Tuesday, Thursday, and alternating Fridays.

21. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
22. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael La Villa  
13 June 2005

  
MICHAEL E. LAVILLA PH.D.  
PRIMARY EXAMINER